

## ABSTRACT OF THE DISCLOSURE

Apparatus and methods for non-invasively determining cardiac output using partial re-breathing techniques are disclosed in which the apparatus is constructed with an instantaneously adjustable deadspace for accommodating differences in breathing capacities of various patients. The apparatus is constructed of inexpensive elements, including a single two-way valve which renders the apparatus very simple to use and inexpensive so that the unit may be readily disposable. The method of the invention provides a novel means of estimating cardiac output based on alveolar CO<sub>2</sub> values rather than end-tidal CO<sub>2</sub> values as previously practiced. A program for calculating cardiac output is also disclosed.

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